Lake El’gygytgyn Project Readiness Review
May 20-21, 2008
CPS Responsibilities

• Receive & store science/drilling cargo in Pevek

• Transport science & drilling cargo to lake via overland traverse

• Provide satellite comms (voice/limited email) and handheld radios for research team

• Provide infrastructure, camp & support personnel for:
  • Permafrost drilling – Autumn 2008
  • Ice strengthening – December 2008
  • Sediment drilling – Winter '08 - Spring '09
In January 2007, CPS sent Sasha Zhulidov, our CPPI Russian partner, to Pevek.

- Information gathering
- Transport options
- Fuel availability, quality, pricing
- Evaluated potential partners
- Examined equipment, infrastructure, & concept of operations
Based on CPPI’s local research in Pevek, and with both AARI and PI agreement, CPS contracted with Chaun Geological Mining Co. (CGE) in Pevek to support the project.

Sergei Gutov,
CGE Director
CGE was established at Pevek in Chukotka during the 1930’s.

The company is experienced in the construction, operation, & maintenance of remote, Russian-style field camps.
CGE owns/maintains, Tractors, Trailers, Bulldozers, Tankers, & Shelters.
CGE has Permafrost Drilling equipment and experience
Traverse Route – Pevek to Lake El’gygytgyn
• CGE Camp Infrastructure will include:

• Heated shelters for sleeping, eating & working
• Indoor storage shelters for materials
• Power
• Water
• Meals
• Washing/bathing facility w. sauna
• Waste handling
• Fuel storage
CGE Responsibilities include

• Provide equipment and personnel to:
  • Operate and maintain CGE equipment
  • Transport people between camp & drill site
  • Maintain CGE equipment and vehicles
  • Fuel CGE generators
  • Deliver fuel for sediment drilling operations
  • Manage & operate field camp
  • Provide communications for CGE personnel (satphones & handheld radios)

• Remove camp infrastructure & sediment drill from the Lake once drilling season is finished
CGE Field Staff
CGE will provide:

- 14 heated mobile sleeping spaces, 3-4 beds each
- 1 mobile canteen
- 1 mobile sauna bath house
- 1 mobile storehouse for food
- 1 mobile shelter for supplies
- 3 mobile toilets
- 1 heated mobile emergency shelter for drill rig
- 1 mobile shelter for core processing
- 1 diesel compressor plant
CGE Mobile Shelters

CGE Infrastructure
CGE Equipment

- Diesel electric power plant
- 1 mobile building for the power plant
- 1 sled
- 2 spare A-01M engines
- 4 mobile fuel tanks
- 3 each Б 110 bulldozers
- 1 each 12 person crawler
- Optional:
  - 10T Truck crane
  - Ural 4320 off-road vehicle
CGE will provide:

• Meals for 24-hour drilling operations
• Power for camp operations
• Emergency shelter for drill site
• Transportation between drill and camp site
• Dedicated emergency vehicle for drilling operations
• Equipment for snow removal and roadway maintenance
• Equipment to set up and move drill infrastructure to/from/between drill sites
СХЕМА ПОЛЕВОГО ЛАГЕРЯ
и распределения электроэнергии между потребителями

1-15 жилье дома  
макс. 35кВт

18 - буровая установка

16-квартирная

17-санитарная

32 1.2кВт

33-34 площадки для транспорта и вертолёта

35 водозабор

36 холодильник  
макс. 7.0кВт

37 бойлерная и цитовка  
макс. 16.35кВт

суммарная макс. мощность потребителей 100 кВт.

23-24 дизельные электро-станции

25 баня  
макс. 3.75кВт

26-27 продуктовый склад и столовая  
макс. 37.6кВт

28-29 утилизаторы

31-32 туалеты  
макс. 0.4кВт

озеро ЭЛЬГЫЫТГЫН  
35

Camp Layout
СХЕМА ПОЛЕВОГО ЛАГЕРЯ
и распределения электроэнергии между потребителями

1-15 жилые домики  макс. 35 кВт
18-бурвая установка
16-керна разделная
17-сани инструмента

19-22. 30 цистерны для дизельного топлива
33-34 площадки для транспорта и вертолета
35-водозабор
36-холодильник  макс. 7.0 кВт
37-бойлерная и цитовая  макс. 16.35 кВт

суммарная макс. мощность потребителей 100 кВт.

23-24 дизельные электро-станции
25-бани  макс. 3.76 кВт
26-27 продуктовый склад и столовая  макс. 37.6 кВт
28-29 углипатор
31-32 туалеты  макс. 0.4 кВт

озеро ЭЛЬГЫГЫТЫН

Camp Layout
CGE Progress to Date

Summer 2007

Fuel was purchased and delivered to Pevek

February 2008
1. Two bulldozers and one tractor repaired
2. Four mobile containers were repaired 2 ea 5 m3, and 2 ea 25 m3
3. The power station building was repaired and the power station was mounted in the building and assembled inside of it.
4. Eight of the mobile sleeping shelters were repaired
5. Three tractors with equipment, materials and some fuel containers started off to build the temporary winter road and start the traverse activities. This work included marking and rolling of the road, and setting up the first terminal and delivery leg of the traverse shuttle.
CGE Progress to Date

March 2008

1. Received 7.4 m³ of science cargo (thermal boxes) at the airport and transported to CGE for storage.
   Continued building the road and traverse activities to the Lake
2. Delivered 121.5 tons of permafrost drilling and camp equipment to the Lake
3. Delivered 17.6 tons of sediment camp equipment to the Lake
4. In Pevek continued repairing camp infrastructure

April 2008

1. As of April 3, 2008, 22 more items for permafrost and sediment drilling were on the way to the lake.

May 2008

1. Winter traverse work completed.